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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/546,137	08/19/2005	David A. Blaker	026032-4947	1344

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FOLEY AND LARDNER LLP
SUITE 500
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WASHINGTON, DC 20007

EXAMINER

BROWN, VERNAL U

ART UNIT	PAPER NUMBER
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2612

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/546,137	Applicant(s) BLAKER ET AL.	
	Examiner VERNAL U. BROWN	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to communication filed on 12/20/2010.

Response to Amendment

The examiner acknowledges the amendment of claims 1-2, 10, 18 and 29.

Response to Arguments

Applicant argues that the prior art of record fail to teach or suggest configuring the control circuit to cause the transmission to be sequenced such that commonly used frequencies of the plurality of possible frequencies are interspersed with less commonly used frequency. It is the examiner's position that the reference Crimmins et al. teaches transmitting the new control code determined based on the device type at various frequencies in a sequential manner and the use of a feedback based processor in order to determine the frequency associated with the control code (col. 12 line 64-col. 13 line 65). Crimmins et al. teaches selecting likely frequencies for the retransmission of the control code (col. 13 lines 14-16) and the examiners considers likely frequencies commonly and less commonly used frequencies. The examiner considers the configuration of the control circuit as claimed in claims 1-17, and 25-26 as an intended use limitation and a functional description of the claimed limitation. The recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. The prior art of Crimmins et al. and Dykema et al. has the capability of providing the same function as the claimed invention and is therefore not patentable distinct. See MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (BD. Pat. App. & Inter. 1987).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 18-21, 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by
Crimmins et al. US Patent 6181255.

Regarding claims 18-21, 27-29, Crimmins et al. teaches initiating a training sequence
(col. 10 lines 1-7);

receiving the RF signal using the wideband receiver (col. 9 lines 43-50, col. 10 lines 35-40);

determining a device type associated with the RF control signal without analyzing or
determining the frequency of transmission of the received RF control signal (col. 12 lines 9-24);

determining a plurality of possible RF frequencies associated with the RF control signal
based on the determined device type (col. 12 lines 42-63). Crimmins et al. teaches conducting a
feedback process for determining a frequency for remotely actuating the device by transmitting
the new RF control signal to the device and waiting for user feedback indicating a successful
actuation, wherein the RF control signals are sequenced ((col. 12 line 64-col. 13 line 65).

Crimmins et al. teaches selecting likely frequencies for the retransmission of the control code
(col. 13 lines 14-16) and the examiners considers likely frequencies commonly and less
commonly used frequencies.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 9-14, 16-17, 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema et al. US Patent 5854593 in view of Crimmins et al. US Patent 6181255..

Regarding claims 1-3, 8, 10, Dykema et al. teaches a trainable transceiver comprising:
an antenna coupled to a receiver for receiving RF control signals (col. lines 36-38) and the RF control signal includes a control code, a set of data characteristic and a RF carrier frequency (col. 6 lines 5-27);

a control circuit (57) coupled to the receiver and having a training mode in which the control circuit is configured to identify a data characteristic of the control signal (col. 6 lines 16-25) and to identify a device type (make) based on a data characteristic such as the number of rising edges in a defined period of time (col. 20 lines 42-67). Dykema et al. also teaches identifying the RF frequency associated with the control signal based on the determined device type (col. 20 lines 55-67). Dykema et al. teaches the control circuit is configured to store a RF frequency (col. 6 lines 14-15) and the control code is a fixed code (col. 15 lines 25-27). Dykema et al. is silent on teaching the receiver is a wideband receiver and the control circuit determine a

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device type associated with the RF control signal without first determining the frequency of transmission of the received RF control signal. Crimmins et al. teaches the use of a wideband receiver in order to receive frequency over a wide frequency range (col. 9 lines 43-45).

Crimmins et al. also teaches the control circuit determined the device type associated with the received RF control signal without first determining the frequency of the received control signal (col. 12 lines 9-24) and teaches the control circuitry determines and store a frequency for transmissions of the modulated RF modulated signal from the trainable transceiver based on the determined device type (col. 12 lines 41-53). Crimmins et al. further teaches analyzing the modulation of the RF control to determine the device type associated with the remote control transmitter (col. 10 lines 45-61). Crimmins et al also teaches the control circuit causes the transmission to be sequential and the control circuit uses the sequential transmission in the feedback based process for determining whether a transmission has been successfully received by the device for remote actuation (col. 12 line 64-col. 13 line 65)..

. It would have been obvious to one of ordinary skill in the art to modify the system of Dykema et al. to include a wideband receiver as disclosed by Crimmins et al. because this allows the transceiver to learn control codes that utilizes a wide range of frequencies and allows the single transceiver to control multiple devices of different manufacturer and determining the device type without first determining the frequency represents an alternative means of determining device type .

Regarding claim 11, Dykema et al. teaches the controller determining a fixed code (col. 15 lines 25-27).

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Regarding claims 4, 12, Dykema et al. teaches the control code is an encrypted rolling code and the controller identify an encryption algorithm base on the data characteristic (col. 25 lines 48-55) but is silent on teaching the control circuit determine a device type associated with the RF control signal without first determining the frequency of transmission of the received RF control signal. Crimmins et al. in an analogous art teaches the control circuit determined the device type associated with the received RF control signal without first determining the frequency of the received control signal (col. 12 lines 9-24) and teaches the control circuitry determines and store a frequency for transmissions of the modulated RF modulated signal from the trainable transceiver based on the determined device type (col. 12 lines 41-53).

It would have been obvious tone of ordinary skill in the art to modify the system of Dykema et al. as disclosed by Crimmins et al. because determining the device type based on the control code signal characteristic without first determining the frequency represents an alternative means of determining device type as disclosed by Dykema et al.

Regarding claims 5-6, 13-14, Dykema et al. teaches the control circuit retrieved the control code and at least one RF frequency and generate a control code including the control code and RF frequency (col. 6 lines 5-20).

Regarding claim 9, Dykema et al. teaches filtering out the RF carrier frequency prior to determining the device type (col. 2 lines 45-50).

Regarding claims 16-17, Dykema et al. teaches a plurality of frequencies are based on the device type and the control circuit generate at each of the plurality of frequencies (col. 20 lines 55-67).

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Regarding claims 25-26, Dykema et al. teaches determining the RF frequency associated with the control signal comprising selecting the list of frequencies from a pre-stored list of frequencies (col. 20 lines 50-67).

Claims 7, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykema et al. US Patent 5854593 in view of Crimmins et al. US Patent 6181255 and further in view of Tsui US Patent 6556813.

Regarding claims 7 and 15, Dykema et al. teaches the tuning of the receiver (col. 7 lines 29-33) but is silent on teaching a wideband receiver. Tsui in an analogous art teaches a wideband receiver and the receiver is tuned to a desired frequency (col. 4 lines 34-48).

It would have been obvious to one of ordinary skill in the art to modify the system of Dykema et al. in view of Crimmins et al. as disclosed by Tsui because a tuned receiver provides a more versatile receiver and allows for the detection of a wide range of frequencies.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crimmins et al. US Patent 6181255 in view of Dykema et al. US Patent 5854593.

Regarding claim 22, Crimmins et al. is silent on teaching teaches the transceiver is mounted in a vehicle and teaches initiating the training sequence by a message on the vehicle bus. Dykema et al. in an analogous art teaches the transceiver is mounted in a vehicle (col. 5

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lines 41-49) and teaches using a display device connected to a vehicle bus to inform the user to initiate a training sequence (col. 6 lines 60-67).

It would have been obvious to one of ordinary skill in the art to modify the system of Crimmins et al as disclosed by . Dykema et al. because mounting the transceiver in a vehicle provide for the convenient use of the remote transceiver and initiating the transceiver training from a vehicle bus provides an alternate means of initiating the training sequence.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crimmins et al. US Patent 6181255 in view of Tsui US Patent 6556813.

Regarding claim 23, Crimmins et al teaches the use of a wideband transceiver (col. 9 lines 43-45) but is silent on teaching a tuned wideband transceiver. Tsui in an analogous art teaches a wideband receiver and the receiver is tuned to a desired frequency (col. 4 lines 34-48).

It would have been obvious to one of ordinary skill in the art to modify the system of Crimmins et al. as disclosed by Tsui because a tuned receiver provides a more versatile receiver and allows for the detection of a wide range of frequencies.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERNAL U. BROWN whose telephone number is (571)272-3060. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Vernal U Brown/
Primary Examiner, Art Unit 2612